

Atty. Dkt. No.: 10010382-1
Appl. No.: 10/066,157

REMARKS

In view of the following remarks, the Examiner is requested to allow Claims 15-21, 27, 29, 30 and 33-48, the only claims pending and under examination in this application.

Claim Rejections - 35 USC § 103

The Examiner states that Claims 15-21, 27, 29, 30, 33-37, 39-45, and 47-48 are rejected under 35 USC § 103(a) as unpatentable over Overbeck (WO 99/47964).

With regard to obviousness rejections, MPEP § 2143 states:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Independent Claims 15 and 39 are drawn to methods of using a chemical array reader. Both of these claims utilize a calibration member having a uniform fluorescent layer for the purpose of 1) determining the position of the focal plane, and 2) calibrating a sensitivity of the detection system. As such, the claimed method employs a calibration member having a uniform fluorescent layer to calibrate a chemical array reader for subsequent scanning of a chemical array. The calibration member of the subject application is described in detail in the specification, including on page 12, lines 15 to 26.

In making this rejection, the Examiner asserts that Overbeck discloses a method of using a DNA array scanner as is claimed in the subject application, including auto-focus and fluorescence detection capability. The Examiner specifically states that Overbeck fails to teach calibration of the focal length with a fluorescent member (i.e., a calibration member as is claimed).

To remedy the deficiencies of Overbeck in making the claimed invention obvious, the Examiner merely states that it would have been obvious to one of

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ordinary skill in the art to use a calibration member as claimed in the subject application to calibrate the focal length.

However, the Applicant submits that Overbeck fails to teach or suggest using a calibration member with a uniform calibration layer as is claimed.

First, as discussed in the previous response, there is no mention at all in Overbeck of using a calibration member, let alone a calibration member with a uniform fluorescent layer as is claimed. Because Overbeck fails to provide even a suggestion of using a calibration member, this reference simply fails to teach or suggest this element of the claimed invention.

Second, to establish a *prima facie* case of obviousness, the proposed modification cannot render the prior art invention unsatisfactory for its intended purpose. Specifically, MPEP §2143 states:

If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)

The teaching in Overbeck that the Examiner asserts establishes a *prima facie* case of obviousness is that of prescanning the array prior to its final scan. In explaining the intended purpose of this prescanning step, Overbeck (on page 33) states that the prescan image is used by the operator to select the scan region for a slide. Specifically, the prescan image of the slide is displayed on a monitor to the operator who then specifies which parts of the slide are to be scanned. Once the selection is made, the array scanner quickly advances to the selected region and performs the (high resolution) scan.

The Applicant submits that the modification of using an independent calibration member as claimed in the subject application would render the prescan function of the Overbeck scanning device non-functional for its intended purpose. In other words, it would be impossible for an operator to select a specific region of a slide to scan from a prescan image of a calibration member (and NOT the slide itself). As such, the Applicant submits that there is no suggestion or motivation to make the proposed modification.

Furthermore, the Applicant has found no teaching or suggestion in Overbeck of calibrating a sensitivity of the detection system using detection signals from the calibration member as is claimed. Indeed, the Examiner cites no passage in

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Overbeck in which this element is taught, nor does the Examiner state that it would have been obvious to one of ordinary skill in the art in view of Overbeck.

In summary, the elements of the claimed invention that are neither taught nor suggested by Overbeck are:

- 1) a calibration member with a uniform fluorescent layer;
- 2) using the calibration member to determine the location of the focal plane; and
- 3) using any calibration member to calibrate the sensitivity of a detector of the detection system.

Therefore, because Overbeck (WO 99/47964) fails to teach or suggest each and every element of the independent claims (i.e., Claims 15 and 39), the Applicant submits that a *prima facie* case of obviousness has not been established. As such, the Applicant respectfully requests withdrawal of this rejection.

The Examiner states that Claims 38 and 46 are rejected under 35 USC § 103(a) as unpatentable over Overbeck (WO 99/47964) in view of King et al. (USPN 5,812,272).

As discussed above, Overbeck fails to teach or suggest a method of using an array scanner in which a calibration member with a uniform fluorescent layer is used to determine the position of the focal plane (e.g., autofocus) and to calibrate the sensitivity of a detector of the detection system.

As the Examiner cites King et al. solely for its teaching of CY3 and CY5 (and other) fluorescent dyes for use in fluorescence detection methods, this reference fails to remedy the fundamental deficiencies in the teachings of Overbeck in establishing a *prima facie* case of obviousness.

Therefore, the Applicants respectfully request withdrawal of this rejection.

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CONCLUSION

In view of the amendments and remarks above, the Applicant respectfully submits that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone Dianne Rees at (650) 485-5999. The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to Deposit Account No. 50-1078, order number 10010382-1.

Respectfully submitted,

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